

WHAT IS CLAIMED IS:

1. A television tuner comprising:
an input tuning circuit coupled to an input terminal;
a high-frequency amplifier supplied with an output of
said input tuning circuit; and
an interstage tuning circuit supplied with an output of
said high-frequency amplifier,
each of said input tuning circuit and said interstage
tuning circuit including a band-switching tuning circuit
having a tuning inductor and a switching diode configured to
switch an inductance of the inductor,
wherein a power supply voltage is applied to an anode
of each of the switching diodes via each of anode-side feed
resistors, the anode being DC-grounded via a current-
conductor, and
wherein a tuning frequency band of each of said input
tuning circuit and said interstage tuning circuit is
switched by applying one of a high and low level switching
voltage to a cathode of each of the switching diodes via
each of cathode-side feed resistors.

2. The television tuner according to Claim 1, wherein
said high-frequency amplifier includes an amplifying element,
the current-conductor for DC-grounding the anode of the
switching diode of said input tuning circuit is a first
resistor, and the anode of the switching diode of said

interstage tuning circuit is connected to an operating voltage applying terminal of the amplifying element such that the current-conductor that DC-grounds the anode of the switching diode of said interstage tuning circuit is the amplifying element.

3. The television tuner according to Claim 1, further comprising a band switching circuit which generates the switching voltage, wherein said band switching circuit is provided with a switching transistor which can be switched on/off, an emitter of the switching transistor is grounded and the power supply voltage is applied to a collector of the switching transistor via a second resistor, and each of the cathodes of the switching diodes is connected to the collector of the switching transistor via each of the cathode-side feed resistors.

4. The television tuner according to Claim 3, wherein the switching transistor and the second resistor are integrated in said band switching circuit.

5. A television tuner comprising:

an input tuning circuit coupled to an input terminal, the input tuning circuit having a first inductance, a first switching diode that tunes the first inductance, a first anode resistor that supplies an anode of the first switching diode with a power supply voltage, and a first cathode

resistor that supplies a switching voltage to a cathode of the first switching diode, a tuning frequency band of the input tuning circuit being switched by switching a voltage level of the switching voltage, the anode of the first switching diode being DC-grounded through a grounding resistor;

an amplifier supplied with an output of the input tuning circuit; and

an interstage tuning circuit supplied with an output of the amplifier, the interstage tuning circuit having a second inductance, a second switching diode that tunes the second inductance, a second anode resistor that supplies an anode of the second switching diode with the power supply voltage, and a second cathode resistor that supplies a switching voltage to a cathode of the second switching diode, a tuning frequency band of the interstage tuning circuit being switched by switching the voltage level of the switching voltage, the anode of the second switching diode being DC-grounded.

6. The television tuner according to Claim 5, wherein the anode of the switching diode of the interstage tuning circuit is connected with the amplifying element.

7. The television tuner according to Claim 5, further comprising a band switching circuit which generates the switching voltage, the band switching circuit having a

semiconductor switch with at least three terminals, a first terminal of the semiconductor switch being directly grounded, the power supply voltage being applied to a second terminal of the semiconductor switch via a terminal resistor, and the first and second cathodes connected to the second terminal of the semiconductor switch via the respective cathode resistor.

8. The television tuner according to Claim 7, wherein the semiconductor switch comprises a bipolar junction transistor and the first and second terminals are the emitter and collector, respectively.

9. The television tuner according to Claim 7, wherein the semiconductor switch and the terminal resistor are integrated.

10. A television tuner comprising:

a semiconductor switch configured to supply different voltages;

an input tuning circuit coupled to an input terminal, the input tuning circuit having a first inductance and a first circuit element that alters a value of the first inductance in accordance with the voltage supplied from the semiconductor switch;

an amplifier supplied with an output of the input tuning circuit; and

an interstage tuning circuit supplied with an output of the amplifier, the interstage tuning circuit having a second inductance and a second circuit element that alters a value of the second inductance in accordance with the voltage supplied from the semiconductor switch.

11. The television tuner according to Claim 10, each of the first and second inductances comprising inductors, the first and second inductances being altered by the first and second circuit elements by effectively bypassing at least one inductor in each of the first and second inductances.

12. The television tuner according to Claim 11, wherein the semiconductor switch comprises a bipolar junction transistor and the first and second circuit elements each comprise a semiconductor diode.

13. The television tuner according to Claim 12, wherein the semiconductor switch is contained within an integrated circuit.